

THREE NEW SPECIES OF *TRICHOGRAMMA*
(HYMENOPTERA: TRICHOGRAMMATIDAE)
FROM NORTH AMERICA

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Abstract.—Three new species of *Trichogramma* from North America are described: *T. marthae* Goodpasture from Maryland and North Carolina, *T. meteorum* Vincent from Florida and *T. stampae* Vincent from Texas, Virginia, and Rioverde, Mexico. Illustrations, host records, distributions, and comparisons with similar species are provided.

Recent advances in *Trichogramma* taxonomy have made possible the identification of most of the known North American species. Nagarkatti and Nagaraja (1968) first demonstrated the usefulness of the male genitalia and antenna as sources for taxonomic characters of *Trichogramma*. Since then, Nagarkatti and Nagaraja have described four North American species (Nagaraja and Nagarkatti, 1973; Nagarkatti, 1975) and provided keys and species group assignments (Nagarkatti and Nagaraja, 1971, 1977) and many illustrations for 11 others. Pinto et al. (1978) provided keys for the common North American species and described two new species from that region. More recently (Platner and Oatman, 1981; Pinto and Oatman, 1985), six new species from North America were described. Pinto and others are currently working on a more comprehensive treatment of the North American *Trichogramma* to include illustrations and keys of all known species. A world key to species and species groups is given by Voegelé and Pin-tureau (1982).

Three new species of *Trichogramma* are described here to provide names for use in publications and other research communications by workers in Florida, Texas, North Carolina and Maryland, from whom much of the material was obtained, and to encourage the use of new taxonomic characters located on the flagellum of males or females of some species.

The descriptions are based on field-collected and laboratory-reared adults, preserved in alcohol, cleared in potassium hydroxide solution and mounted on glass microslides in balsam or Hoyer's medium. Rearing procedures followed those of Thorpe (1982). All laboratory cultures were maintained at 27°C, 70-80% RH, and constant light. Host eggs were *Heliothis virescens* (Fabricius). Description of color for *T. marthae* and *T. stampae* was based on freshly killed specimens from laboratory culture. For *T. meteorum*, only alcohol-preserved, field-collected ma-

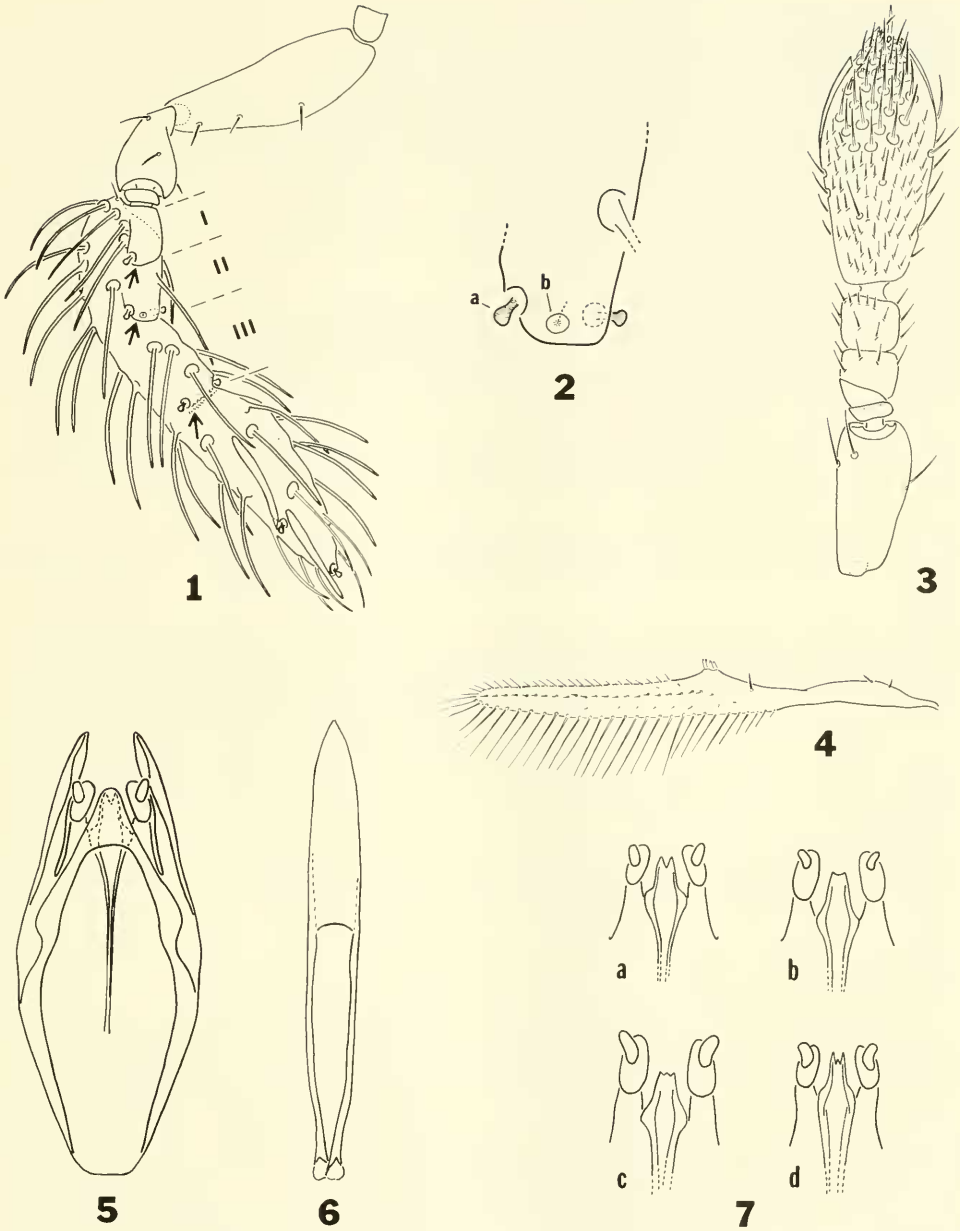
terial was available. Holotype quantitative data are presented separately as counts and ratios followed in parentheses by the measurements. Combined quantitative data for the male type series (including the holotype) are given in brackets and represent, in sequence, the mean, standard error, range, and sample size (N). Quantitative data for the female paratypes represent the range of counts or ratios followed in brackets by the mean, standard error, and sample size. On some paratypes, certain character-bearing structures are missing or obscured; thus, the sample size "N" is not the same for all characters measured. For the male genitalia (Fig. 17), we follow the terminology of Nagarkatti and Nagaraja (1968, 1971) with the exceptions listed by Pinto et al. (1978). However, we use the terms "scutellum" for the second dorsal sclerite on the mesothorax, and "flagelliform setae" for the longer, more numerous setae on the antenna of males, instead of the terms "mesoscutellum" and "flagellar setae," respectively, of Pinto et al. (1978). We prefer "scutellum" over "mesoscutellum" because in *Trichogramma* and most other chalcidoids the pronotum and metanotum are undifferentiated segmental plates; only the mesonotum shows differentiation into two sclerites. Thus, in our opinion it is unnecessary to use the prefix meso- with scutellum when indicating the posterior sclerite of the mesonotum. We prefer "flagelliform setae" over "flagellar setae" because here we use more than one type of seta on the flagellum for taxonomic characters. We feel that "flagelliform" more clearly refers to the shape of the individual setae rather than their location. Other terms used here for various types of antennal sensillae are trichoid seta, peg sensillum, campaniform sensillum, placoid sensillum, and apicoventral seta, which correspond respectively to sensillum types a, f, g, h, and i of Voegele et al. (1975). In that paper, antennal structures of only female *Trichogramma* were described. However, except for apicoventral setae, similar structures are present on the flagellum of males of most *Trichogramma* species. Most of the terminology used in describing the male flagellum is given in Fig. 1. On males of some species, we have found that the presence, number, and location of the trichoid, peg, and campaniform sensillae have taxonomic value. Trichoid setae (shown in Figs. 8 and 14) are short, bristle-like setae on the venter of basoventral divisions I–III of males of some species. The number and location of placoid sensillae and numbers of apicoventral setae are used here as taxonomic characters for females only (shown in Figs. 3, 9, 10, 15, 16).

Trichogramma marthae Goodpasture, NEW SPECIES

Figs. 1–7

Color.—Body of adult male golden yellow; dark brown on prothorax, scutum anteromedially, abdominal segments I and IV–VI laterally and II–III dorsally. Female similar to male except entire thorax yellow; grayish brown markings on abdomen weaker; tarsomere III on all legs dark brown.

Holotype male (male type series statistics in brackets).—Antenna (Fig. 1) with flagellum (excluding annellus) relatively long and curved, 0.21 as wide as long (0.033 and 0.162 mm) [0.19 ± 0.004 ; 0.16–0.23; N = 29], 1.08 as long as hindtibia (0.150 mm) [1.10 ± 0.012 ; 0.99–1.24; N = 29]; flagelliform setae relatively long and slender, tapering gradually from base to a more or less rounded apex, 71 in number [54.61 ± 2.402 ; 34–84; N = 28], the longest 1.61 as long as maximum width of flagellum (0.053 and 0.033 mm) [1.70 ± 0.031 ; 1.47–2.08; N = 28]; basoventral constrictions of flagellum strong; basoventral division I of flagellum



Figs. 1-7. *Trichogramma marthae*. 1, 2, 5-7, Male. 3, 4, Female. 1, Antenna. Arrow = basoventral constriction; numerals indicate basoventral divisions. 2, Basoventral division II; a = peg sensillum, b = campaniform sensillum. 3, Antenna (ventral view). 4, Hindwing. 5, Genital capsule (dorsal view). 6, Aedeagus. 7, Structural variation in the median ventral projection; a, b, d, lab reared specimens, c, field collected (Hexlena, Herford Co., North Carolina).

with 1 peg sensillum on the outer apicolateral angle, II-III with 1 peg sensillum on both apicolateral angles, II with a campaniform sensillum apicomediaally (Fig. 2).

Forewing vein tracts well defined, area between 4th and 5th vein tracts with 14 setae [13.56 ± 0.798 ; 8-24; N = 27]; longest seta on post-apical margin 0.145

as long as maximum width of wing (0.037 and 0.254 mm) [0.15 ± 0.004 ; 0.11–0.20; N = 26].

Hindwing (as in Fig. 4) posterior vein tract extending apically ca. $\frac{1}{2}$ the distance of the middle tract [range of paratypes $\frac{1}{3}$ – $\frac{2}{3}$], anterior tract composed of 2 setae [range of paratypes 2–4] and extending apically ca. $\frac{1}{3}$ the distance of the middle tract [range of paratypes $\frac{1}{6}$ – $\frac{1}{3}$], component setae of posterior and anterior tracts smaller than those of middle tract.

Scutellum with anterior seta 0.14 as long as posterior seta (0.005 and 0.033 mm) [0.18 ± 0.009 ; 0.13–0.26; N = 27].

Genital capsule (Fig. 5) 0.42 as wide as long (0.046 and 0.109 mm) [0.43 ± 0.004 ; 0.39–0.49; N = 28]; DEG tapering to a rounded apex, sides weakly concave, base strongly constricted; DEG extending 0.89 (0.097 mm long) [0.87 ± 0.003 ; 0.83–0.90; N = 28], CS extending 0.90 (0.099 mm long) [0.89 ± 0.003 ; 0.85–0.92; N = 28], and MVP extending 0.88 (0.096 mm long) [0.84 ± 0.003 ; 0.82–0.88; N = 28] the length of the genital capsule; MVP broad, apex notched, notch with small median tooth on 13 of 28 specimens (Fig. 7); aedeagus 0.76 (0.114 mm long) as long as hindtibia [0.80 ± 0.009 ; 0.73–0.93; N = 28], 1.04 as long as genital capsule [1.04 ± 0.010 ; 1.00–1.23; N = 28]; apodemes (0.06 mm long) comprising 0.54 [0.51 ± 0.007 ; 0.43–0.58; N = 28] the length of the aedeagus (Fig. 6).

Female (mean, standard error, and number of paratypes measured are in brackets).—Antennal club (Fig. 3) with 29–38 apicoventral setae [33.50 ± 1.936 ; N = 4] arranged in 8–9 [8.50 ± 0.289 ; N = 4] irregular transverse rows; placoid sensillae 5 in number, the most proximal extending basally to near midpoint of club length. Only two placoid sensillae are shown in Fig. 3 due to the ventral perspective.

Forewing area between 4th and 5th vein tracts with 6–25 [15.30 ± 1.181 ; N = 30] setae; longest seta on postapical margin 0.11–0.19 [0.14 ± 0.004 ; N = 30] as long as maximum width of wing.

Scutellum with anterior seta 0.13–0.35 [0.18 ± 0.010 ; N = 29] as long as posterior seta.

Ovipositor 1.12–1.45 [1.28 ± 0.013 ; N = 30] as long as hindtibia.

Type information.—Holotype δ reared from a laboratory culture established on 18-VI-1981, ex *H. virescens* egg cloth, collected on 11-VI-1981 from Beltsville, Prince Georges Co., Maryland, by Kevin W. Thorpe, mounted in balsam, deposited in the National Museum of Natural History (NMNH no. 77500); 64 paratypes (33 δ , 31 ♀) in NMNH: 5 δ , 6 ♀ , same data as holotype; 26 δ , 20 ♀ reared from same laboratory culture as holotype, mounted in Hoyer's medium on 9–13-X-1982; 2 δ , 5 ♀ , mounted in balsam, reared from a *Lambdina pellucidaria* (Grote and Robinson) (Lepidoptera: Geometridae) egg, collected by A. T. Drooz, 24-IV-1980 on loblolly pine (*Pinus taeda* L.: Pinaceae) from Hexlena, Hertford Co., North Carolina.

Discussion.—According to Thorpe (1983), *T. marthae* (= his *T. sp. 4*) is reproductively isolated from *T. exiguum* Pinto and Platner, *T. pretiosum* Riley, and *T. minutum* Riley, based on crossing trials between *T. marthae* and various U.S. populations of these species. The morphology of the male genital capsule of this species corresponds to that of the minutum group of Voegelé and Pintureau (1982). Males of this species differ from those of other known North American

species of *Trichogramma* by the MVP apex which ranges from notched to arcuately emarginate (Fig. 7). On ca. 50% of males, the notch has a small median tooth (Fig. 7, c, d). *Trichogramma exiguum* and *T. fuentesi* Torre are similar to *T. marthae* in terms of most other male genital characters, coloration, and the general appearance of the flagellum of males. However, on *T. marthae*, the sides of the DEG narrow less abruptly (compare to Figs. 4, 5, Torre, 1980 and Fig. 1, Pinto et al., 1983) and the flagelliform setae of males taper less abruptly (compare to Fig. 3, Pinto et al., 1978) at their apex than on *T. exiguum* or *T. fuentesi*. Also, on the flagellum of males, *T. exiguum* has a peg sensillum on both apicolateral angles of basoventral division I, whereas *T. marthae* and *T. fuentesi* lack a peg sensillum on the inner apicolateral angle. On most specimens of *T. fuentesi*, the hindwing posterior vein tract extends to ca. $\frac{3}{4}$ the distance along the middle tract (Fig. 1a, Pinto et al., 1983), but on *T. marthae* it extends $\frac{1}{2}$ – $\frac{2}{3}$ the distance along the middle tract.

This species is named for Martha Grace, a personal friend.

Trichogramma meteorum Vincent, NEW SPECIES

Figs. 8–13

Color.—Body of adult male golden yellow; grayish brown on prothorax, scutum, coxae and tarsal segments III; abdominal segments II–III dark brown; pale yellow on legs except coxae and tarsal segment III. Female similar to male except entire thorax golden yellow; dark brown on abdominal terga II–III dorsally and IV–V laterally.

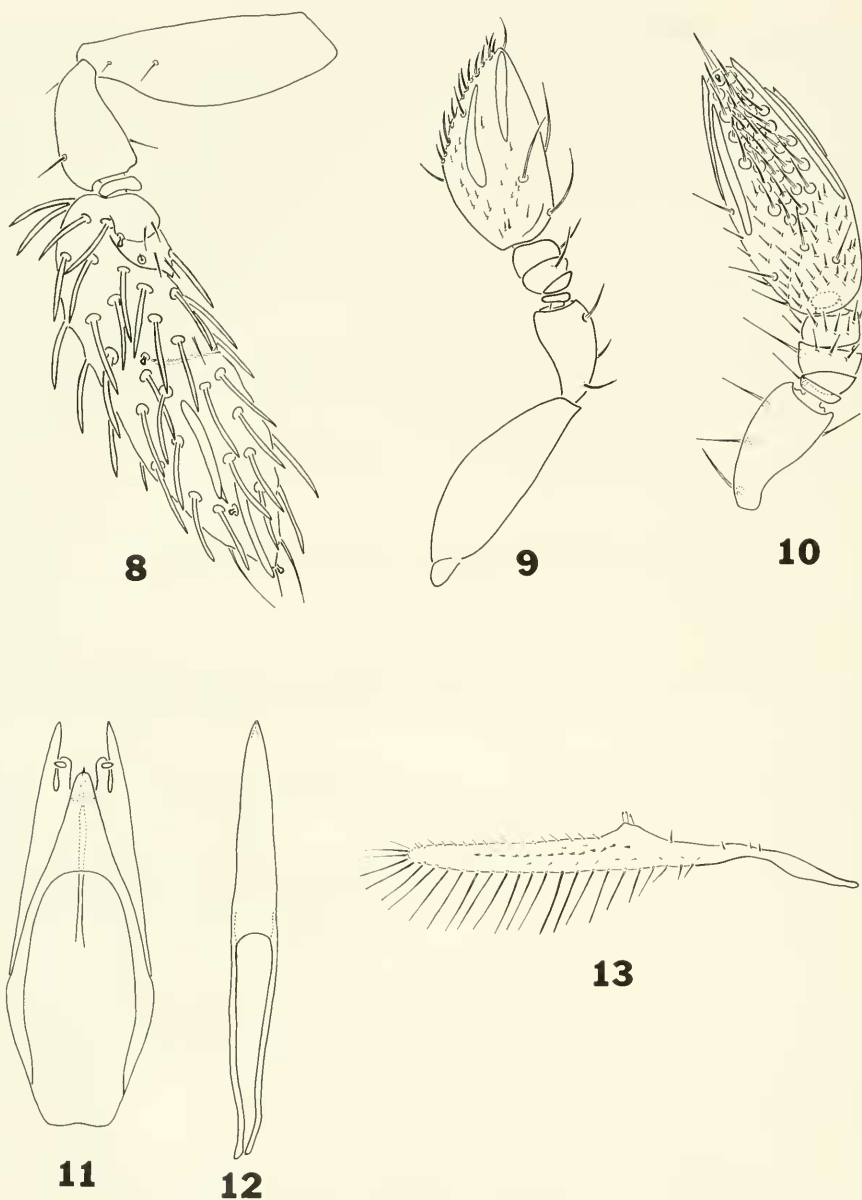
Holotype male (male type series statistics in brackets).—Antenna (Fig. 8) with flagellum (excluding annellus) relatively short and straight, 0.30 as wide as long (0.041 and 0.135 mm) [0.33 ± 0.006 ; 0.30–0.35; N = 8], 0.88 as long as hindtibia (0.153 mm) [0.89 ± 0.009 ; 0.85–0.93; N = 8]; flagelliform setae relatively short, stout, tapering abruptly at apex, 78 in number [60.69 ± 3.635 ; 47–78; N = 8], the longest 0.67 as long as maximum width of flagellum (0.027 and 0.041 mm) [0.70 ± 0.012 ; 0.65–0.75; N = 8]; basoventral constrictions of flagellum weak; basoventral divisions of flagellum with a few appressed trichoid setae, three on I–III together [5.33 ± 0.391 ; 3–7; N = 9], I and III each with one peg sensillum on the outer apicolateral angle, II without a peg sensillum but with a campaniform sensillum on outer apicolateral angle.

Forewing vein tracts well defined, area between 4th and 5th vein tracts with 13 setae [11.50 ± 2.363 ; 7–15; N = 3], longest seta on post-apical margin 0.13 as long as maximum width of wing (0.032 and 0.252 mm) [0.14 ± 0.007 ; 0.13–0.15; N = 3].

Hindwing (as in Fig. 13) posterior vein tract extending apically ca. $\frac{1}{2}$ the distance of the middle tract, anterior tract composed of two setae (range of paratypes 2–3) and extending apically ca. $\frac{1}{4}$ the distance of the middle tract, component setae of posterior and anterior tracts smaller than those of middle tract.

Scutellum with anterior seta 0.46 as long as posterior seta (0.013 and 0.029 mm) [0.35 ± 0.018 ; 0.30–0.46; N = 10].

Genital capsule (Fig. 11) 0.33 as wide as long (0.041 and 0.124 mm) [0.33 ± 0.011 ; 0.29–0.38; N = 7]; DEG tapering gradually to a rounded apex, sides weakly concave, base weakly constricted; DEG extending 0.86 (0.107 mm long) [$0.87 \pm$



Figs. 8-13. *Trichogramma meteorum*. 8, 11, 12, Male. 9, 10, 13, Female. 8, Antenna. 9, Antenna (lateral view). 10, Antenna (ventral view). 11, Genital capsule (dorsal view). 12, Aedeagus. 13, Hindwing.

0.007; 0.83-0.91; N = 11], CS extending 0.90 (0.112 mm long) [0.90 ± 0.006 ; 0.88-0.93; N = 12], and MVP extending 0.88 (0.109 mm long) [0.86 ± 0.006 ; 0.83-0.90; N = 11] the length of the genital capsule; MVP slender, apex acute; aedeagus (0.126 mm long) 0.83 as long as hindtibia [0.89 ± 0.015 ; 0.81-1.00; N = 12], 1.02 as long as genital capsule [1.02 ± 0.007 ; 0.99-1.07; N = 12]; apo-

demes (0.059 mm long) comprising 0.47 the length of the aedeagus (Fig. 12) [0.45 ± 0.005 ; 0.42–0.47; $N = 12$].

Female (mean, standard error, and number of paratypes measured are in brackets).—Antennal club (Figs. 9, 10) with 26–28 apicoventral setae [26.88 ± 0.515 ; $N = 4$] arranged in 7–8 [7.25 ± 0.164 ; $N = 8$] irregular transverse rows; placoid sensillae 5 in number, the most proximal extending basally to near midpoint of club length.

Forewing area between 4th and 5th vein tracts with 5–13 [10.18 ± 0.651 ; $N = 11$] setae; longest seta on post-apical margin 0.12–0.15 [0.13 ± 0.003 ; $N = 11$] as long as maximum width of wing.

Scutellum with anterior seta 0.30–0.48 [0.35 ± 0.015 ; $N = 19$] as long as posterior seta.

Ovipositor 0.91–1.01 [0.96 ± 0.007 ; $N = 19$] as long as hindtibia.

Type information.—Holotype ♂ reared from a *Dioryctria ebeli* Mutuura and Munroe egg (Lepidoptera: Pyralidae) collected 15–22 June 1979 on slash pine (*Pinus elliotii* Engleman: Pinaceae) from Olustee, Baker Co., Florida, by Robert A. Belmont, deposited in the National Museum of Natural History (NMNH no. 77498); 33 paratypes (13 ♂, 20 ♀) in NMNH with the same data as the holotype. This species is known only from the type locality.

Discussion.—Details of parasitism rates and other host/parasite information are given by Belmont (1979) and Belmont and Habeck (1983). The morphology of the male genital capsule (DEG not constricted at base, MVP well developed and forming a sharp point apically) of this species does not correspond well with any of the species groups of Voegele and Pintureau (1982). Males of *T. meteorum* differ from those of most known North American species of *Trichogramma* by having very short, stout, flagelliform setae and by the presence of appressed trichoid setae on the basoventral divisions of the antennal club (Fig. 8). Males of *T. brevicapillum* Pinto and Platner (their Fig. 17, 1978), and *T. stampae* Vincent (new species, Fig. 17) are similar to *T. meteorum* in these respects. However, on males of *T. meteorum*, the DEG gradually tapers to a rounded apex which does not quite reach the apex of the CS, and the MVP is slender and gradually tapers to a sharp point apically (Fig. 11), compared to males of *T. brevicapillum* in which the DEG gradually tapers to a moderately acute apex which extends to the apex of the CS, and the MVP is blunt apically. Also, the forewing disc of *T. meteorum* is sparsely covered with setae arranged in well-defined vein tracts and the anterior and posterior vein tracts of the hindwing extend no more than $\frac{1}{2}$ the distance of the middle tract (Fig. 13), while on *T. brevicapillum* the forewing disc is densely covered with setae arranged in poorly defined vein tracts (area between the 4th and 5th vein tracts with 72.5 ± 3.0 ; 52–89; $N = 12$ setae; Pinto et al., 1978) and the anterior and posterior vein tracts of the hindwing extend to the wing apex (Fig. 9, Pinto et al., 1978). On males of *T. stampae* the antennal club has relatively strong basoventral constrictions, the flagelliform setae taper gradually from base to apex, the DEG is strongly constricted at its base, and the DEG and MVP extend to the CS apex. The antennal club of male *T. meteorum* has very weak basoventral constrictions, the flagelliform setae taper more abruptly at their apex, the DEG is not constricted basally, and the DEG and MVP do not extend to the CS apex. Living specimens of *T. meteorum* are golden to pale yellow with some grayish

brown markings on the thorax and abdomen, while specimens of *T. brevicapillum* and *T. stampae* are predominantly dark brown to black with a few pale areas on the head and legs.

The specific epithet *meteorum* is an adjective from the Greek *meteōros* meaning suspended or high in the air, and refers to the habitat of its only known host.

Trichogramma stampae Vincent, NEW SPECIES

Figs. 14–19

Color.—Body of adults dark brown; scutum, abdominal terga II–III black; pale yellow on vertex, antenna, and legs except grayish brown on tarsal segment III and hindfemur.

Holotype male (male type series statistics in brackets).—Antenna (Fig. 14) with flagellum (excluding annellus) relatively short and straight, 0.26 as wide as long (0.032 and 0.123 mm) [0.28 ± 0.005 ; 0.26–0.33; N = 17], 0.76 as long as hindtibia (0.162 mm) [0.77 ± 0.004 ; 0.73–0.80; N = 17]; flagelliform setae relatively short and slender, tapering gradually from base to apex, 42 in number [38.50 ± 0.868 ; 32–42; N = 16], the longest 1.27 as long as maximum width of flagellum (0.040 and 0.032 mm) [1.20 ± 0.015 ; 1.04–1.28; N = 17]; basoventral constrictions of flagellum strong; basoventral divisions of flagellum with several appressed trichoid setae, 13 on I–III together [11.38 ± 0.415 ; 8–14; N = 16], I–III each with 1 peg sensillum on the inner and outer apicolateral angle, II with a campaniform sensillum apicomediaally.

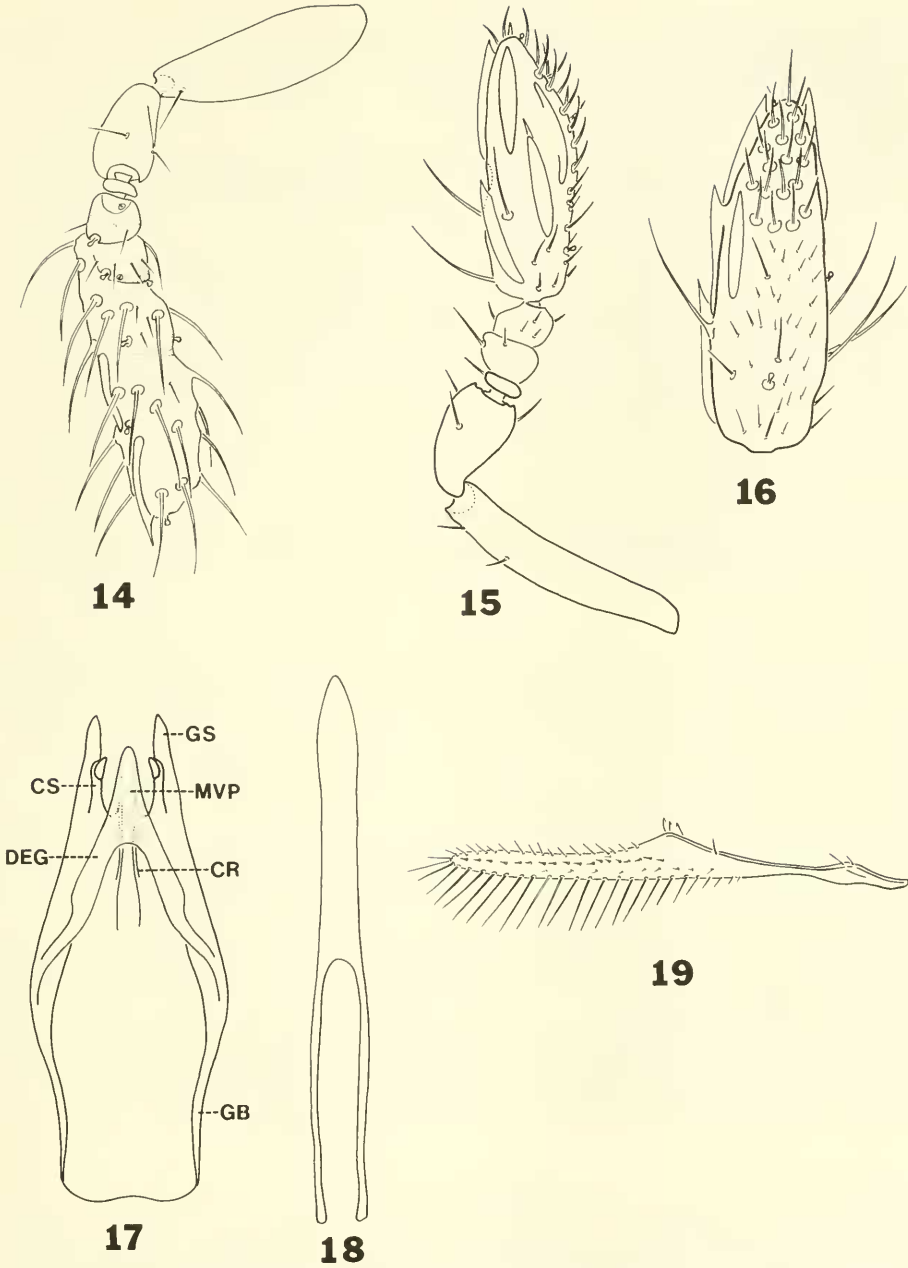
Forewing vein tracts well-defined, area between 4th and 5th vein tracts with 17 setae [13.38 ± 0.877 ; 8–18; N = 3]; longest seta on post-apical margin 0.17 as long as maximum width of wing (0.044 and 0.256 mm) [0.18 ± 0.302 ; 0.15–0.20; N = 11].

Hindwing (as in Fig. 19) posterior vein tract extending apically ca. $\frac{1}{2}$ the distance of the middle tract, anterior tract composed of 2 setae (range of paratypes 1–2) and extending apically ca. $\frac{1}{3}$ the distance of the middle tract, component setae of posterior and anterior tracts smaller than those of middle tract.

Scutellum with anterior seta 0.19 as long as posterior seta (0.007 and 0.037 mm) [0.21 ± 0.010 ; 0.16–0.30; N = 14].

Genital capsule (Fig. 17) 0.44 as wide as long (0.065 and 0.147 mm) [0.39 ± 0.015 ; 0.32–0.46; N = 11]; DEG tapering to a rounded apex, sides weakly concave, base strongly constricted; DEG extending 0.92 (0.135 mm long) [0.93 ± 0.004 ; 0.90–0.95; N = 17], CS extending 0.89 (0.131 mm long) [0.89 ± 0.005 ; 0.84–0.92; N = 15], and MVP extending 0.89 (0.131 mm long) [0.89 ± 0.005 ; 0.85–0.91; N = 16] the length of the genital capsule; MVP not tapering apically, apex rounded; aedeagus (Fig. 18) (0.170 mm) 1.05 as long as hindtibia [1.06 ± 0.010 ; 1.02–1.15; N = 17], 1.16 as long as genital capsule [1.14 ± 0.005 ; 1.10–1.18; N = 17]; apodemes (0.073 mm long) comprising 0.43 the length of the aedeagus [0.43 ± 0.007 ; 0.38–0.50; N = 17].

Female (mean, standard error, and number of paratypes measured are in brackets).—Antennal club (Figs. 15, 16) with 12–17 apicoventral setae [13.71 ± 0.286 ; N = 21] arranged in 4–6 [4.74 ± 0.154 ; N = 34] transverse rows; placoid sensillae 8 in number, raised, acute apically, the base of the most proximal sensillum extending basally to near the club base, the apex overhanging a shallow depression on club.



Figs. 14-19. *Trichogramma stampae*. 14, 17, 18, Male. 15, 16, 19, Female. 14, Antenna. 15, Antenna (lateral view). 16, Antennal club (ventral view). 17, Genital capsule (dorsal view)—(CR, chitinized ridge; CS, chelate structure; DEG, dorsal expansion of gonobase; GB, gonobase; GS, gonostyli; MVP, median ventral projection). 18, Aedeagus. 19, Hindwing.

Forewing area between 4th and 5th vein tracts with 15–33 [23.13 ± 0.531 ; $N = 57$] setae; longest seta on post-apical margin 0.13–0.18 [0.15 ± 0.001 ; $N = 57$] as long as maximum width of wing.

Scutellum with anterior seta 0.16–0.50 [0.27 ± 0.011 ; $N = 45$] as long as posterior seta.

Ovipositor 0.83–0.99 [0.93 ± 0.005 ; $N = 59$] as long as hindtibia.

Type information.—Holotype δ reared from a *Euphydryas phaeton* (Drury) egg (Lepidoptera: Nymphalidae), collected by Nancy E. Stamp, 12 July 1979 on turtlehead (*Chelone glabra* L.: Scrophulariaceae) from the Conservation and Research Center of the National Zoological Park, Front Royal, Warren Co., Virginia, deposited in the National Museum of Natural History (NMNH no. 77499); 76 paratypes in NMNH—9 δ , 59 φ with the same data as the holotype, and 8 δ from a laboratory culture reared on eggs of *Heliothis virescens* for 7 generations.

Additional material examined.—4 δ , 3 φ reared from eggs of *Chlosyne janais* (Drury) (Lepidoptera: Nymphalidae), collected by Roy A. Kendall, 27 October 1971 on *Anisacanthus wrightii* (Torr) Gray (Acanthaceae) from the Ebony Hill Research Station, San Antonio, Bexar Co., Texas; 45 δ , 145 φ reared from eggs of *Chlosyne ehrenbergi* (Geyer), collected by Roy A. Kendall, 12 March 1980 on *Buddleja sessiliflora* H.B.K. (Loganaceae) from Media Luna nr. Rioverde, San Luis Potosi, Mexico.

Discussion.—Details of parasitism rates and other host/parasite information given by Stamp (1981). The morphology of the male genital capsule of this species corresponds to that of the minutum group of Voegelé and Pintureau (1982). Males of *T. stampae* differ from those of most known North American species of *Trichogramma* by having very short flagelliform setae on the flagellum and by the presence of minute, appressed trichoid setae on the basoventral divisions of the club (Fig. 14). Males of *T. brevicapillum* and *T. meteorum* are similar in these respects. Details of the relative similarities and differences between males of these three species are given in the discussion under *T. meteorum*. Females of *T. stampae* differ from those of most other known *Trichogramma* species in having 8 placoid sensillae on the antennal club, the base of the most proximal sensillum extending basally to near the club base, the apex acute, raised, and overhanging a shallow depression on club.

This species is named for Nancy E. Stamp, who provided specimens from her study on parasitism of *E. phaeton* in Virginia (Stamp, 1981).

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